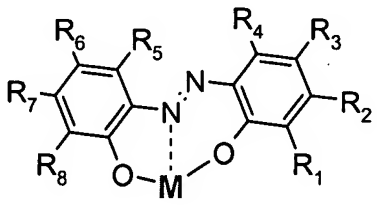
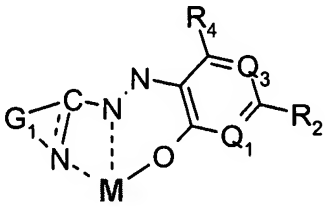
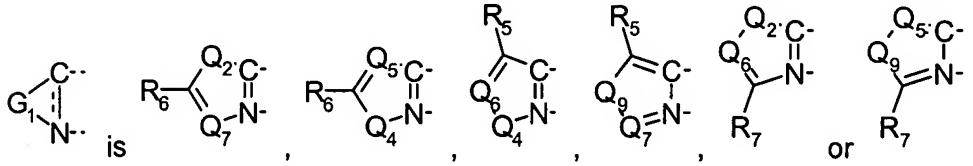
In the Claims:

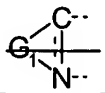
1. (currently amended): An optical recording medium comprising a substrate, a reflecting layer and a recording layer, wherein the recording layer comprises a compound of formula $[L_1M^{r-4}L_2]_o[A^{m-}]_p[Z^{n+}]_q$ (I), $[L_1M^{r-3}L_3]_o[A^{m-}]_p[Z^{n+}]_q$ (II) or $[L_3M^{r-2}L_4]_o[A^{m-}]_p[Z^{n+}]_q$ (III), which compound of formula (I), (II) or (III) may also be in a mesomeric or tautomeric form, wherein

L_1 and L_2 are each independently of the other  , and

L_3 and L_4 are each independently of the other  ,

M indicating the position of M^{r-4}, M^{r-3} or M^{r-2} in (I), (II) or (III), respectively;

 is , , , , or ;

Q_1 is CR_1 or N , Q_2 is O, S, NR_{10} or Q_5=Q_8 , Q_3 is CR_3 or N , Q_4 is O, S, NR_{10} or Q_7=Q_8 , Q_5 is CR_5 or N , Q_6 is CR_6 or N , Q_7 is CR_7 or N , Q_8 is CR_8 or N , and Q_9 is O, S, NR_{10} or Q_6=Q_8, ~~preferably either Q_1 is CR_1 and Q_3 is CR_3 or Q_1 and Q_3 are both N, and/or Q_8 in Q_5=Q_8, Q_6=Q_8 or Q_7=Q_8 is in the β-position relative to the nitrogen atom of~~  ~~,~~ and in the case of tautomers Q_1 may also be NR_1 and/or Q_3 may also be NR_3;

R_1, R_3, R_4, R_5, R_6, R_7 and R_8 are each independently of the others H, halogen, OR_9, SR_9, $NR_{10}R_{15}$, $NR_{10}COR_{11}$, $NR_{10}COOR_9$, $NR_{10}CONR_{12}R_{13}$, $NR_{10}CN$, $OSiR_{10}R_{11}R_{14}$, COR_{10}, $CR_{10}OR_{11}OR_{14}$, $NR_9R_{12}R_{13}^+$, NO_2, CN, CO_2^-, $COOR_9$, SO_3^-, $CONR_{12}R_{13}$, SO_2R_{10}, $SO_2NR_{12}R_{13}$, SO_3R_9, PO_3^-, $PO(OR_{10})(OR_{11})$; C_1-C_{12}alkyl, C_2-C_{12}alkenyl, C_2-C_{12}alkynyl, C_3-C_{12}cycloalkyl, C_3-C_{12}cycloalkenyl or

C_3-C_{12}heterocycloalkyl each unsubstituted or mono- or poly-substituted by halogen, OR_9, SR_9, $NR_{10}R_{15}$, $NR_{10}COR_{11}$, $NR_{10}COOR_9$, $NR_{10}CONR_{12}R_{13}$, $NR_{10}CN$, $OSiR_{10}R_{11}R_{14}$, COR_{10}, $CR_{10}OR_{11}OR_{14}$, $NR_9R_{12}R_{13}^+$, NO_2, CN, CO_2^-, $COOR_9$, SO_3^-, $CONR_{12}R_{13}$, SO_2R_{10}, $SO_2NR_{12}R_{13}$ and/or SO_3R_9; or C_7-C_{12}aralkyl, C_6-C_{10}aryl or C_5-C_9heteroaryl each unsubstituted or mono- or poly-substituted by R_{10}, halogen, OR_9, SR_9, $NR_{10}R_{15}$, $NR_{10}COR_{11}$, $NR_{10}COOR_9$, $NR_{10}CONR_{12}R_{13}$, $NR_{10}CN$, $OSiR_{10}R_{11}R_{14}$, COR_{10}, $CR_{10}OR_{11}OR_{14}$, $NR_9R_{12}R_{13}^+$, NO_2, CN, CO_2^-, $COOR_9$, SO_3^-, $CONR_{12}R_{13}$, SO_2R_{10}, $SO_2NR_{12}R_{13}$, SO_3R_9, PO_3^-, $PO(OR_{10})(OR_{11})$, $SiR_{10}R_{11}R_{14}$ and/or $SiOR_{10}OR_{11}OR_{14}$;

R_2 is OR_9, SR_9, $NR_{10}R_{15}$, $NR_{10}COR_{11}$, $NR_{10}COOR_9$, $NR_{10}CONR_{12}R_{13}$ or $NR_{10}CN$;

each R_9, independently of any other R_9, is R_{15}, COR_{15}, $COOR_{15}$, $CONR_{12}R_{13}$, CN or a negative charge, preferably H or a negative charge;

R_{10}, R_{11} and R_{14} are each independently of the others hydrogen, C_1-C_{12}alkyl, C_2-C_{12}alkenyl, C_2-C_{12}alkynyl, $[C_2$-C_8alkylene-O-$]_k$-R_{16}, $[C_2$-C_8alkylene-NR_{17}-$]_k$-R_{16} or C_7-C_{12}aralkyl, it being possible for R_{10} in $NR_{10}R_{15}$, $NR_{10}COR_{11}$, $NR_{10}COOR_9$, $NR_{10}CONR_{12}R_{13}$ or $NR_{10}CN$ additionally to be a delocalisable negative charge;

R_{12}, R_{13} and R_{15} are each independently of the others H; C_1-C_{12}alkyl, C_2-C_{12}alkenyl, C_2-C_{12}alkynyl, C_3-C_{12}cycloalkyl, C_3-C_{12}cycloalkenyl or C_3-C_{12}heterocycloalkyl each unsubstituted or mono- or poly-substituted by halogen, OR_{10}, SR_{10}, $NR_{10}COR_{11}$, $NR_{10}COOR_{11}$, $NR_{10}CONR_{11}R_{14}$, $OSiR_{10}R_{11}R_{14}$, COR_{10}, $CR_{10}OR_{11}OR_{14}$, $NR_{10}R_{11}R_{14}^+$, NO_2, CN, CO_2^-, $COOR_{10}$, SO_3^-, $CONR_{11}R_{14}$, $SO_2NR_{11}R_{14}$, SO_2R_{10}, $NR_{11}R_{14}$ and/or SO_3R_{10}; or C_7-C_{12}aralkyl, C_6-C_{12}aryl or C_5-C_9heteroaryl each unsubstituted or mono- or poly-substituted by R_{10}, halogen, OR_{10}, SR_{10}, $NR_{10}COR_{11}$, $NR_{10}COOR_{11}$, $NR_{10}CONR_{11}R_{14}$, $OSiR_{10}R_{11}R_{14}$, COR_{10}, $CR_{10}OR_{11}OR_{14}$, $NR_{10}R_{11}R_{14}^+$, NO_2, CN, CO_2^-, $COOR_{14}$, SO_3^-, $CONR_{11}R_{141}$, SO_2R_{10}, $SO_2NR_{11}R_{14}$, SO_3R_{10}, PO_3^-, $PO(OR_{10})(OR_{11})$, $NR_{11}R_{14}$, $SiR_{10}R_{11}R_{14}$ and/or $SiOR_{10}OR_{11}OR_{14}$; or $NR_{12}R_{13}$, $NR_{11}R_{14}$ or $NR_{10}R_{15}$ is a five- or six-membered heterocycle which may contain a further N or O atom and which can be mono- or poly-substituted by C_1-C_8alkyl;

R_{16} and R_{17} are each independently of the other mono- or poly-substituted C_1-C_{12}alkyl, C_2-C_{12}alkenyl, C_2-C_{12}alkynyl, C_3-C_{12}cycloalkyl, C_3-C_{12}cycloalkenyl, C_3-C_{12}heterocycloalkyl, C_7-C_{12}aralkyl, C_6-C_{10}aryl or C_5-C_9heteroaryl;

M^r is a transition metal cation having r positive charges;

A^{m-} is an inorganic, organic or organometallic anion, or a mixture thereof;

Z^{n+} is a proton, a metal, ammonium or phosphonium cation, a positively charged organic or organometallic chromophore, or a mixture thereof;

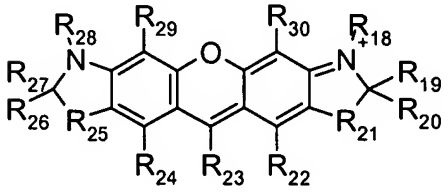
it being possible once or more times radicals of the same or different ligands L_1, L_2, L_3 and/or L_4, each selected from the group consisting of R_1, R_2, R_3, R_4, R_5, R_6, R_7, R_8, R_9, R_{10}, R_{11}, R_{12}, R_{14}, R_{15} and R_{16}, to be bonded to one another in pairs by way of a direct bond or an -O-, -S- or -N(R_{17})- bridge, and/or for from 0 to p anions A^{m-} and/or from 0 to q cations Z^{n+} each to be bonded to any radical R_1, R_2, R_3, R_4, R_5, R_6, R_7, R_8, R_9, R_{10}, R_{11}, R_{12}, R_{13}, R_{14}, R_{15}, R_{16} or R_{17} of the same or different ligands L_1, L_2, L_3 and/or L_4 or to M^r by way of a direct bond or an -O-, -S- or -N(R_{17})- bridge;

k is an integer from 1 to 6;

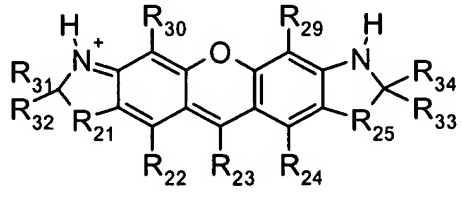
m, n and r are each independently of the others an integer from 1 to 4; ~~preferably m and n are 1 or 2~~ and r is 2 or 3; o is a number from 1 to 4; and

[[o,]] p and q are each a number from 0 to 4, the ratio of o, p and q to one another, according to the charge of the associated sub-structures, being such that in formula (I), (II) or (III) there is no resulting excess positive or negative charge;

and with the further proviso that when R_1, R_3, R_4, R_5, R_7 and R_8 are all H, R_2 is OH, R_6 is NO_2, M is Co and r is 3, $[Z^{n+}]_q$ does not have the formula



or



wherein R_{18} and R_{28} are each independently of the other hydrogen; C_1-C_{24}alkyl, C_2-C_{24}alkenyl, C_2-C_{24}alkynyl, C_3-C_{24}cycloalkyl, C_3-C_{24}cycloalkenyl or C_3-C_{12}heterocycloalkyl each unsubstituted or mono- or polysubstituted by halogen, NO_2, CN, $NR_{35}R_{36}$, $NR_{35}R_{36}R_{37}^+$, $NR_{35}COR_{36}$, $NR_{35}CONR_{35}R_{36}$, OR_{35}, SR_{35}, COO^-, COOH, $COOR_{35}$, CHO, $CR_{37}OR_{35}OR_{36}$, COR_{35}, SO_2R_{35}, SO_3^-, SO_3H, SO_3R_{35} or

$OSiR_{37}R_{38}R_{39}$; or C_7-C_{18}aralkyl, C_6-C_{14}aryl or C_4-C_{12}heteroaryl each unsubstituted or mono- or poly-substituted by halogen, NO_2, CN, $NR_{35}R_{36}$, $NR_{35}R_{36}R_{37}^+$, $NR_{35}COR_{36}$, $NR_{37}CONR_{35}R_{36}$, R_{35}, OR_{35}, SR_{35}, CHO, $CR_{37}OR_{35}OR_{36}$, COR_{35}, SO_2R_{35}, SO_3^-, SO_3R_{35}, $SO_2NR_{35}R_{36}$, COO^-, $COOR_{35}$, $CONR_{35}R_{36}$, PO_3^-, $PO(OR_{35})(OR_{36})$, $SiR_{37}R_{38}R_{39}$, $OSiR_{37}R_{38}R_{39}$ or $SiOR_{37}OR_{38}OR_{39}$; but R_{18} and R_{28} are not simultaneously hydrogen;

R_{19}, R_{20}, R_{26} and R_{27} are each independently of the others C_1-C_{12}alkyl unsubstituted or mono- or poly-substituted by halogen, OR_{37}, SR_{37}, NO_2, CN, $NR_{40}R_{41}$, COO^-, COOH, $COOR_{37}$, SO_3^-, SO_3H or SO_3R_{37},

it being possible for R_{19} and R_{20} and/or R_{26} and R_{27} and/or R_{31} and R_{32} and/or R_{33} and R_{34} to be so bonded to one another in pairs by way of a direct bond or an -O-, -S- or $-NR_{42}$- bridge that together they form a 5- to 12-membered ring;

R_{21} and R_{25} are each independently of the other C_1-C_3alkylene or C_1-C_3alkenylene each unsubstituted or mono- or poly-substituted by halogen, R_{42}, OR_{42}, SR_{42}, NO_2, CN, $NR_{43}R_{44}$, COO^-, COOH, $COOR_{42}$, SO_3^-, SO_3H or SO_3R_{42};

R_{22}, R_{24}, R_{29} and R_{30} are each independently of the others hydrogen, halogen, OR_{45}, SR_{45}, NO_2, $NR_{45}R_{46}$; or C_1-C_{24}alkyl, C_2-C_{24}alkenyl, C_2-C_{24}alkynyl, C_3-C_{24}cycloalkyl, C_3-C_{24}cycloalkenyl, C_3-C_{12}heterocycloalkyl or C_7-C_{18}aralkyl each unsubstituted or mono- or poly-substituted by halogen, OR_{45}, SR_{45}, NO_2, CN or $NR_{45}R_{46}$;

R_{23} is hydrogen; $(CH_2)_kCOO^-$, $(CH_2)_kCOOR_{47}$, C_1-C_{24}alkyl, C_2-C_{24}alkenyl, C_2-C_{24}alkynyl, C_3-C_{24}cycloalkyl or C_3-C_{24}cycloalkenyl each unsubstituted or mono- or poly-substituted by halogen, $NR_{47}R_{48}$ or OR_{48}; or C_7-C_{18}aralkyl, C_6-C_{14}aryl or C_5-C_{13}heteroaryl each unsubstituted or mono- or poly-substituted by halogen, NO_2, CN, $NR_{47}R_{48}$, SO_3^-, SO_3R_{47}, $SO_2NR_{47}R_{48}$, COO^-, $(CH_2)_kOR_{47}$, $(CH_2)_kOCOR_{47}$, $COOR_{47}$, $CONR_{47}R_{48}$, OR_{47}, SR_{47}, PO_3^-, $PO(OR_{47})(OR_{48})$ or $SiR_{37}R_{38}R_{39}$;

R_{31}, R_{32}, R_{33} and R_{34} are each independently of the others C_1-C_{12}alkyl unsubstituted or mono- or poly-substituted by halogen, OR_{35}, SR_{35}, NO_2, CN, $NR_{40}R_{41}$, $COOR_{37}$, SO_3^-, SO_3H or SO_3R_{35};

R_{35}, R_{36}, R_{40}, R_{41}, R_{42}, R_{43}, R_{44}, R_{45}, R_{46}, R_{47} and R_{48} are each independently of the others hydrogen; C_1-C_{24}alkyl, C_2-C_{24}alkenyl, C_2-C_{24}alkynyl, C_3-C_{24}cycloalkyl, C_3-C_{24}cycloalkenyl or

C_3-C_{12}heterocycloalkyl each unsubstituted or mono- or poly-substituted by halogen, NO_2, CN, $NR_{37}R_{38}$, $NR_{37}R_{38}R_{39}^+$, $NR_{37}COR_{38}$, $NR_{37}CONR_{38}R_{39}$, OR_{37}, SR_{37}, COO^-, COOH, $COOR_{37}$, CHO, $CR_{37}OR_{38}OR_{39}$, COR_{37}, SO_2R_{37}, SO_3^-, SO_3H, SO_3R_{37} or $OSiR_{37}R_{38}R_{39}$; or C_7-C_{18}aralkyl, C_6-C_{14}aryl or C_5-C_{13}heteroaryl each unsubstituted or mono- or poly-substituted by halogen, NO_2, CN, $NR_{37}R_{38}$, $NR_{37}R_{38}R_{39}^+$, $NR_{37}COR_{38}$, $NR_{37}CONR_{38}R_{39}$, R_{37}, OR_{37}, SR_{37}, CHO, $CR_{37}OR_{38}OR_{39}$, COR_{37}, SO_2R_{37}, SO_3^-, $SO_2NR_{37}R_{38}$, COO^-, $COOR_{39}$, $CONR_{37}R_{38}$, PO_3^-, $PO(OR_{37})(OR_{38})$, $SiR_{37}R_{38}R_{39}$, $OSiR_{37}R_{38}R_{39}$ or

$SiOR_{37}OR_{38}OR_{39}$;

or $NR_{35}R_{36}$, $NR_{40}R_{41}$, $NR_{43}R_{44}$, $NR_{45}R_{46}$ or $NR_{47}R_{48}$ are a five- or six-membered heterocycle which may contain a further N or O atom and which can be mono- or poly-substituted by C_1-C_8alkyl;

R_{37}, R_{38} and R_{39} are each independently of the others hydrogen, C_1-C_{20}alkyl, C_2-C_{20}alkenyl, C_2-C_{20}alkynyl or C_7-C_{18}aralkyl, it being possible for R_{37} and R_{38} to be bonded to one another by way of a direct bond or an -O-, -S- or –NC_1-C_8alkyl- bridge so that together they form a five- or six-membered ring;

it being possible for from 1 to 4 radicals selected from the group consisting of R_{18}, R_{19}, R_{21}, R_{22}, R_{23}, R_{24}, R_{25}, R_{26}, R_{28}, R_{29}, R_{30}, R_{35}, R_{36}, R_{37}, R_{38}, R_{39}, R_{40}, R_{41}, R_{42}, R_{43}, R_{44}, R_{45}, R_{46}, R_{47} and R_{48} to be bonded to one another in pairs by way of a direct bond or an -O-, -S- or –N(G)– bridge or bonded singly to A^{m-} and/or Z^{n+}, wherein G is mono- or poly-substituted C_1-C_{24}alkyl, C_2-C_{24}alkenyl, C_2-C_{24}alkynyl, C_3-C_{24}cycloalkyl, C_3-C_{24}cycloalkenyl, C_3-C_{12}heterocycloalkyl, C_7-C_{18}aralkyl, C_6-C_{14}aryl or C_5-C_{13}heteroaryl.

2. (original): An optical recording medium according to claim 1, wherein R_2 and R_4 are hydroxy, O^-, mercapto or S^- and R_6 or R_7 is nitro or cyano; Z^{n+} is a xanthene; and/or R_{10} is methyl, ethyl, n-propyl, isopropyl, n-butyl, 2-butyl, isobutyl, tert-butyl, 3-pentyl, n-amyl, tert-amyl, neopentyl, 2,2-dimethyl-but-4-yl, 2,2,4-trimethyl-pent-5-yl, cyclopropyl, cyclopropylmethyl, cyclobutyl, cyclobutylmethyl, cyclopentyl, cyclopentylmethyl, cyclohexyl, cyclohexylmethyl, cyclohex-4-enyl-methyl, 5-methyl-cyclohex-4-enyl-methyl or 2-ethyl-hexyl, each unsubstituted or mono- or poly-substituted by fluorine.

3. (currently amended): An optical recording medium according to claim 1 ~~or 2~~, wherein M^{r+} is Co^{2+}, Co^{3+}, Cu^+, Cu^{2+}, Zn^{2+}, Cr^{3+}, Ni^{2+}, Fe^{2+}, Fe^{3+}, Al^{3+}, Ce^{2+}, Ce^{3+}, Mn^{2+}, Mn^{3+}, Si^{4+}, Ti^{4+}, V^{3+}, V^{5+} or Zr^{4+}.

4. (currently amended): An optical recording medium according to claim 1, ~~2 or 3,~~ additionally comprising a cyanine or xanthene cation. ~~, preferably a benzoindocarbocyanine or rhodamine cation.~~

5. (currently amended): A method for the optical recording, storage or playback of information, wherein a recording medium according to claim 1~~, 2, 3 or 4~~ is used.

6. (currently amended): A method according to claim 5, wherein the recording and/or the playback take place in a wavelength range of from 600 to 700 nm. ~~, preferably from 630 to 690 nm, more especially from 640 to 680 nm, very especially from 650 to 670 nm, particularly at 658±5 nm.~~

7. (currently amended): A method of producing an optical recording medium, wherein a solution of a compound of formula (I), (II) or (III) according to claim 1~~, 2 or 3~~ in an organic solvent is applied to a substrate having depressions.

8. (currently amended): A method for the optical recording, storage or playback of information, wherein a recording medium according to claim ~~1, 2 or~~ 3 is used.

9. (original): A method according to claim 8, wherein the recording and/or the playback take place in a wavelength range of from 600 to 700 nm.

10. (currently amended): A compound of formula (II) or (III) according to claim 1, ~~2 or 3~~ or a tautomeric or mesomeric form thereof wherein R_2 is O^-, S^-, N^-COR_{11}, N^-COOR_9, $N^-CONR_{12}R_{13}$ or N^-CN.

11.(new): An optical recording medium according to claim 1, wherein either Q_1 is CR_1 and Q_3 is CR_3 or Q_1 and Q_3 are both N, and/or Q_8 in $Q_5=Q_8$, $Q_6=Q_8$ or $Q_7=Q_8$ is in the β-position relative to the nitrogen atom of 

.

12. (new): An optical recording medium according to claim 2, wherein M^{r+} is Co^{2+}, Co^{3+}, Cu^+, Cu^{2+}, Zn^{2+}, Cr^{3+}, Ni^{2+}, Fe^{2+}, Fe^{3+}, Al^{3+}, Ce^{2+}, Ce^{3+}, Mn^{2+}, Mn^{3+}, Si^{4+}, Ti^{4+}, V^{3+}, V^{5+} or Zr^{4+}.

13. (new): An optical recording medium according to claim 4, wherein the cyanine or xanthene cation is a benzoindocarbocyanine or rhodamine cation.

14. (new): An optical recording medium according to claim 2 additionally comprising a cyanine or xanthene cation.

15. (new): An optical recording medium according to claim 14, wherein the cyanine or xanthene cation is a benzoindocarbocyanine or rhodamine cation.

16. (new): A method according to claim 5, wherein the recording and/or the playback take place in a wavelength range of from 630 to 690 nm.

17. (new): A method according to claim 5, wherein the recording and/or the playback take place in a wavelength range of from 650 to 670 nm.

18. (new): A method for the optical recording, storage or playback of information, wherein a recording medium according to claim 2 is used.

19. (new): A method according to claim 18, wherein the recording and/or the playback take place in a wavelength range of from 600 to 700 nm.